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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,405	02/02/2000	Michiaki Uchikawa	0879-0252P	6155

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EXAMINER

HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/496,405

Applicant(s)

UCHIKAWA, MICHIAKI

Examiner

Timothy J. Henn

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 8 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-7 and 9-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 2, 6-13 and 15- 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (US 6,335,760) in view of Anderson (US 6,137,534) in view of Nagasaki (US 5,153,730).

[claim 1]

In regard to claim 1, note that Sato discloses an image data reading device that reads original image data (Figure 1, Item 13; Column 4, Lines 1-3); a converting device that determines whether conversion of the original image data is necessary based on a size of the original image data and a display resolution or "size" corresponding to a display and if conversion is determined to be necessary, converts the original image data read by the image data reading device into display size image data in the display size of the display (e.g. Figures 13 and 14A; Column 6, Line 38 - Column 8, Line 54) and an image recording device (Figure 1, Item 17) that records the original image data read by the image data reading device onto a first recording medium (Figure 1, Item 16; Column 3, Lines 60-67), wherein the display includes a display memory for storing

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image data to be displayed before being displayed (Figure 1, Item 18). Therefore, it can be seen that Sato lacks recording the display image data produced by the converting device into the first recording medium if the conversion of the original image data has been determined to be necessary by the converting device.

Anderson discloses an enhanced image file (Figure 5) which includes multiple version of an image at different resolutions which allows a digital camera to quickly display a version of the captured image on a display without delays related to resizing the original image data to fit the display (Column 7, Line 51 - Column 8, Line 5). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the image display data in an enhanced image file as taught by Anderson to quickly display a version of the image without the need for resizing the original image data the next time the image is displayed. However, Sato in view of Anderson lacks reading the original data from an interchangeable recording medium prior to performing the conversion.

Nagasaki discloses storing original image data in a first recording medium and later reading it out prior to image processing in order to increase the rate at which the camera is able to capture sequential images (Column 2, Line 45 – Column 3, Line 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an interchangeable recording medium as taught by Nagasaki in order to allow the user to take many pictures at short intervals. The examiner notes that when such a system is added to the camera of Sato in view of Anderson, the original image data would be read out from an interchangeable recording

medium and then selectively processed to create display image data as claimed.

[claim 2]

In regard to claim 2, Sato in view of Anderson in view of Nagasaki lacks an interchangeable recording medium which is built into the camera. Official Notice is taken that buffer memories, such as memory card 34 of Nagasaki are notoriously well known to be built into cameras to reduce costs and lower the number of items a user must carry. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the buffer memory 34 taught by Nagasaki to the camera of Sato in view of Anderson to be built into the camera.

[claim 3]

In regard to claim 3, note that Nagasaki discloses an interchangeable recording medium which is detachably mounted to the camera (Column 4, Line 64 – Column 5, Line 2)

[claim 6]

In regard to claim 6, note that the first recording medium of Sato is detachably mounted in the image file apparatus (Column 3, Lines 66-67).

[claim 7]

In regard to claim 7, note that Anderson discloses the use of the reduced resolution images to quickly display image data without resizing the original image data while Sato discloses only converting the image data into thinned or resized image data if necessary as determined by the image data and the inherent resolution of the display. It is therefore submitted that if the conversion was not necessary, the resized image

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data would not be created and thus the original image data would be readout by the image data reading device and on the other hand if the conversion was necessary, the resized image data would be readout under the teachings of Anderson. It is further noted that Sato discloses a display driver (Figure 1, Item 21) that drives the display to display an image in accordance with the readout image data (Column 4, Lines 10-20).

[claim 9]

In regard to claim 9, note that Sato discloses an image file apparatus wherein if the size of the original image data is large than the display size (i.e. for display sizes B, C and D in Figures 13 and 14A) corresponding to the display, the converting device is configured to determine that conversion is necessary, and convert the original image data in order to thin or "reduce" the number of pixels (Column 6, Line 38 - Column 8, Line 54).

[claim 10]

In regard to claim 10, note that Sato discloses changing the resolution of an output image to correspond to a display size, but does not teach an interpolation process to increase the resolution of an image if determined to be necessary based on the display size. However, it is well known in the art that interpolation processes can be used to increase image resolution (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a resolution increasing interpolation process in Sato to be able to increase the resolution of an image to meet a required display size of the display.

[claim 11]

In regard to claim 11, note that the original image data is captured via digital communication (Figure 1, note that the system is a digital system using digital communication to transfer data), the captured original image data being read by the image data reading device.

[claims 12, 13, 14, 15-18 and 20]

Claims 12, 13, 14, 15-18 and 20 are method claims corresponding to apparatus claims 1, 2, 3, 7-10 and 11, respectively. Therefore, claims 12, 13, 14, 15-18 and 20 are analyzed and rejected as previously discussed with respect to claims 1, 2, 3, 7-10 and 11.

[claim 19]

In regard to claim 19, note that Sato in view of Anderson in view of Nagasaki determines that the conversion is not necessary if the size of the original image data is compatible with the display size corresponding to the display apparatus (Figures 13 and 14A; Column 6, Line 38 - Column 8, Line 54).

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (US 6,335,760) in view of Anderson (US 6,137,534) in further view of Nagasaki (US 5,153,730) as applied to claim 1 above, and in further view of Takahashi (US 5,067,029).

[claim 4]

In regard to claim 4, note that Sato in view of Anderson discloses an image file apparatus which meets the requirements set forth in claim 1 as discussed above. Therefore, it can be seen that Sato in view of Anderson lacks a first recording medium, which is built-in to the image file apparatus.

Takahashi discloses an electronic still camera, which includes an image file storage apparatus, which is built-in to the camera (Figure 10, Items 34, 40 or 56) to reduce the total number of external pieces that the user must carry. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a built-in first recording medium as taught by Takahashi to reduce the number of pieces a user must carry.

[claim 5]

In regard to claim 5, note that Sato in view of Anderson discloses an image file apparatus which meets the requirements set forth in claim 1 as discussed above. Therefore, it can be seen that Sato in view of Anderson lacks a first recording medium, which is attached to an outside of the image file apparatus.

Takahashi discloses an electronic still camera, which includes an optical recording unit which is detachably linked or "attached to an outside" of the digital camera. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a detachably linked external recording unit or "first recording medium" as taught by Takahashi to decrease the overall weight of the camera.

Allowable Subject Matter

5. Claim 8 is allowed.

The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 8, the prior art does not teach or fairly suggest an image apparatus which selectively processes original image data in order to create display image data if necessary, and chooses one of the original image data or display image data which is to be displayed based on information stored in a management table as claimed.

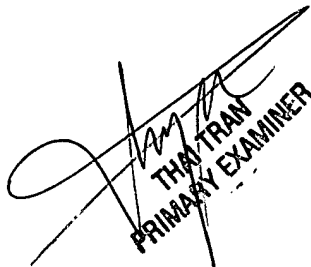
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571) 272-7310. The examiner can normally be reached on M-F 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJH
8/29/2005


THAI TRAN
PRIMARY EXAMINER